MSD

June 1, 1999

Ms. Liza I. Montalvo
Remedial Project Manager
Kentucky/Tennessee Section
U. S. EPA, Region IV
61 Forsyth Street
Atlanta, GA 30303

Re: Results of Air Quality Monitoring - FY99 Third Quarter (FY99-3Q),
Lees' Lane Superfund Site, Jefferson County, Kentucky
Administrative Order on Consent, U. S. EPA Docket No. 91-32-C

Dear Ms. Montalvo:

In accordance with paragraph 11, under, Reporting Requirement, of the subject Consent Order and Attachment I, Operation and Maintenance Plan for Post-Removal Site Control at the Lees' Lane Landfill Site, Section 4.2, Air Quality Monitoring, attached for your information and files is one photocopy each of the following items, prepared by Radian Corporation, P. O. Box 13000, Research Triangle Park, North Carolina 27709, and received by MSD on May 28, 1999.

1. Radian Corporation letter, dated March 12, 1999, 2 pages.

2. Figure 1, Lees' Lane Landfill, Sampling Locations, 1 page.

3. Table 1, TO-14 Data Summary for Ambient Air Samples at the Lees' Lane Landfill, Sampling date: March 12, 1999, 1 page.

4. Table 2, On-Site Meteorological Data, Sampling date, March 12, 1999, 1 page.

5. Table 3, TO-14 Data Summary for Gas Monitoring Well Samples at the Lees' Lane Landfill, Louisville, KY, Sampling Date, March 12, 1999, 1 page.

Louisville and Jefferson County Metropolitan Sewer District
700 West Liberty Street Louisville, Kentucky 40203-1913 502-540-6000

Please advise if you have any questions concerning the attached information.

Sincerely,

Carl A. Neumayer
Director of Operations

CAN/dc
Lee'sair399

cc: Mr. Jeff Pratt, KNREPC
Division of Waste Management
Mr. Rick Hogan, KNREPC
Division of Waste Management
G. R. Garner, Executive Director
File: WD-2 (Lees' Lane M & M Quarterly)

RADIAN INTERNATIONAL LLC

219116.2601

May 18,1999

Mr. Dan Sammons
Chief Chemist
Louisville Metropolitan Sewer District
4522 Algonquin Parkway
Louisville, KY 40211

Dear Dan:

Enclosed is the summary analytical report for the ambient air and gas monitoring well samples collected at the Lee's Lane Landfill site on 12 March 1999 (Quarter 25).

A map of the site, labeled with the sample collection locations for your reference, is shown in Figure 1. Table 1 is a tabular summary for the ambient sample with the primary analytes required for submission to the regulatory authorities. All ambient air samples indicate low levels of the primary analytes at a reduced level compared to the last reporting quarter. Quality control data from the field blank and laboratory replicates are of good quality.

The monitoring sites for the collection were chosen based on a combination of prevailing on-site meteorology and available sites in the adjacent residential neighborhood per the standard sampling protocol. The meteorological conditions were cool (24-47 F) with light north-northeast wind during the majority of the sampling day. Meteorological data readings on-site were not available, therefore the information displayed in Table 2 was obtained from the Louisville Airport National Weather Service Station. The ambient samples were collected 3-5 feet above ground level. The ambient samples collected were integrated over a 7-hour collection period in Summa® canisters.

Table 3 is a tabular summary of the gas well samples with the primary analytes required for submission to EPA. The gas monitoring wells were screened with portable survey type instruments prior to field sample collection.

The methane analysis was performed by GC/FID on a separate analytical system from the TO-14 analysis at Radian's Austin Laboratory. The TO-14 analytical methodology using Gas Chromatography/Mass Spectrometry (GC/MS) was employed. Samples were handled with standard laboratory chain-of-custody procedures. Sample canisters and flow controllers were cleaned and blanked using method TO-12 for total nonmethane hydrocarbons prior to field deployment. Twelve (12) of the thirteen (13) planned field samples were successfully collected and analyzed for methane and the TO-14 target analytes. Quality control parameters of precision

(repeatability) and spiking of surrogate compounds meet internal Radian and project-required specifications. Quality control checks for this data set are characterized as good.

The reliability of this data set can be characterize as good quality data, based on the repeatability (analytical precision), surrogate spike recoveries, blank levels (acceptable) and the relatively few number of unresolved interfering peaks in the sample chromatograms. The field blank canister reported positive hits for methylene chloride (1.34 ppb), toluene (4.01 ppbv), Trichloroethene (0.93ppbv), methane, (0.83 ppmv). The field blank levels are higher than the laboratory blank levels for these analytes. The reported results have not been blank corrected in attached tables per our standard project procedure.

It should be noted that Well G-1 was not sampled due to the physical condition of the lock. The locks had been vandalized and therefore could not be opened during the collection effort. Please initiate a corrective action request for the locks to be replaced at the Well G-1 location.

Radian appreciates the opportunity to assist your staff with this project. Please advise me at (919) 461-1242 if you have any questions.

Sincerely,

Robert F. Jongleux
Project Manager

Enclosure

c: Chad Morris, Radian/LOU
Project File/Task 26

TABLE 1

TO-14 DATA SUMMARY FOR AMBIENT AIR SAMPLES AT THE LEE'S LANE LANDFILL LOUISVILLE, KENTUCKY

SAMPLING DATE: 12 March 1999

	Ambient Air Samples					
Sample ID	U1	A1	A2	R1	R2	R3
Canister ID	RA2033	RA2031	RA2103	RA2034	RA2032	RA2070
Dilution Factor	0.4104	0.3514	0.3170	0.3705	0.3698	0.3358
Location	Upwind	On-site	On-site (dup)	Residential	Residential	Residential
Veriflow ID	A138513	A168514	A134133	A134135	A176658	A176657
Compound (ppbV)						
Benzene	0.50	0.49	0.48	0.56	0.58	0.67
Methylene chloride	0.38	1.47	0.43	0.68	0.23	0.49
Toluene	1.46	1.33	1.35	1.50	2.30	2.53
Vinyl chloride	0.06	ND	ND	ND	0.09	0.10
Xylene (Total)	0.43	0.48	0.48	0.47	0.57	0.64
Methane (ppmV)	20.90	12.40	11.40	10.30	12.50	11.50

TABLE 2

LOCAL METEOROLIGICAL DATA

SAMPLING DATE: 12 March 1999

Time	Barometric Pressure (in Hg)	Temperature (F)	Dewpoint (F)	Wind Direction (from)	Wind Speed (knots)	Observation
0600	30.31	24	18	North	6	Clear
0700	30.32	24	18	Variable	6	Partly Cloudy
0800	30.34	27	19	North	7	Partly Cloudy
0900	30.36	31	19	Northeast	7	Mostly Sunny
1000	30.37	34	19	Northeast	5	Mostly Sunny
1100	30.36	37	19	Variable	7	Sunny
1200	30.34	41	18	Northeast	8	Sunny
1300	30.32	43	18	Northeast	9	Mostly Sunny
1400	30.27	46	18	Northeast	10	Mostly Sunny
1500	30.25	47	17	Northeast	8	Sunny
1600	30.25	48	13	East	3	Mostly Sunny
1700	30.24	47	15	Northeast	9	Partly Cloudy

Source: National Weather Service, Louisville, Ky.

TABLE 3

TO-14 DATA SUMMARY FOR GAS MONITORING WELL SAMPLES AT THE LEE'S LANE LANDFILL LOUISVILLE, KENTUCKY

SAMPLING DATE: 12 March 1999

	Well Samples						TRIP
Sample ID	G1	G2	G3	G4	G5-L	G5-R	BLANK
Canister ID	RA2401	RA2102	RA2030	RA2076	RA2081	RA2079	RA2035
Dilution Factor	0.4089	0.4148	0.4191	0.4013	0.4084	0.4151	0.3707
Orifice	D104	D3	B1	D8	D6	D33	N/A
Compound (ppbV)							
Benzene	N/A	0.21	0.43	0.06	0.19	0.59	0.08
Methylene chloride	N/A	0.1	0.31	0.37	0.09	0.19	1.34
Toluene	N/A	0.61	1.67	0.46	0.62	1.74	4.01
Vinyl chloride	N/A	ND	ND	ND	0.07	ND	ND
Xylene (Total)	N/A	0.1	0.28	ND	0.23	0.51	ND
Methane (ppmV)	N/A	8.20	13.10	17.00	14.10	13.10	0.83

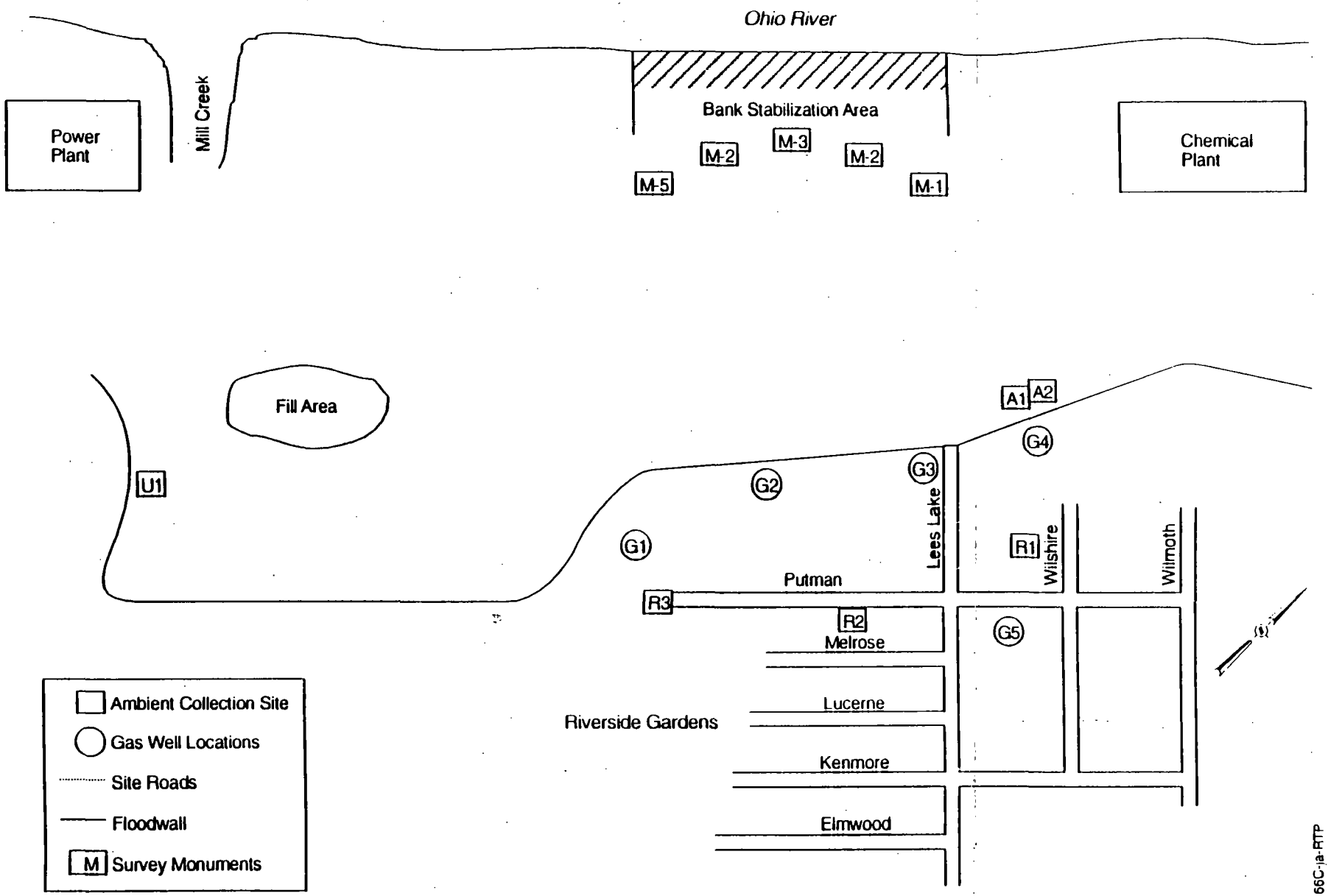

Figure 1. Lees Lane Landfill Sampling Locations